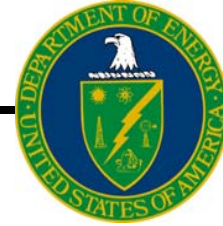


Operations Infrastructure Support

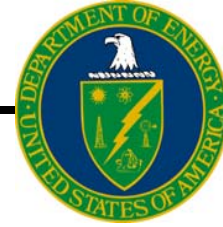
**Larry Snyder
Director
Office of Site Services**



Infrastructure

Mission

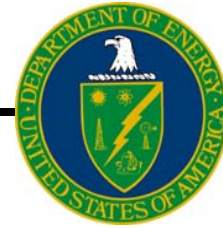
Cost effectively operate and maintain general landlord facilities and services in support of current and future missions.



Infrastructure

Background

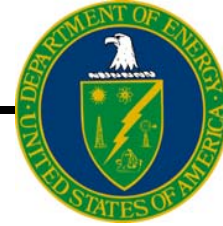
- Infrastructure supports major nuclear/industrial complex of more than 300 square miles and ~10,000 employees.
- Many infrastructure systems were upgraded during the 1990s (water, sewer, office buildings, bridges, chillers).



Infrastructure

Background (cont.)

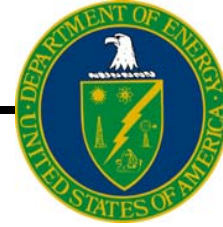
- Steam plants are in the process of being replaced.
- High voltage portion of electrical system is operated by South Carolina Electric and Gas.
- Current infrastructure capacity meets or exceeds all anticipated demands.



Infrastructure

Contract End State

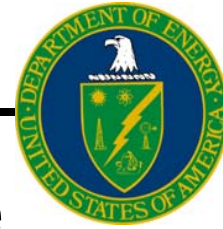
- Requirements for existing infrastructure will remain through contract term.
- Infrastructure is expected to experience only minor reductions in some areas due to cleanup/ closure activities.



Infrastructure

Assumptions

- Landlord (EM) funding for infrastructure will continue to be minimal necessary for Site mission work.
- Current boundaries will remain unchanged.

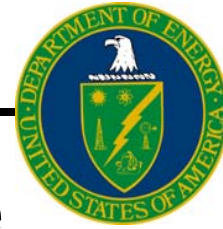


Infrastructure Scope

Utilities – Major systems:

Electrical Power

- Primary transmission system operated by South Carolina Electric and Gas (SCE&G).
- Secondary transmission and intra-area systems operated by M&O Contractor
- Peak demand is approximately 52 MW.

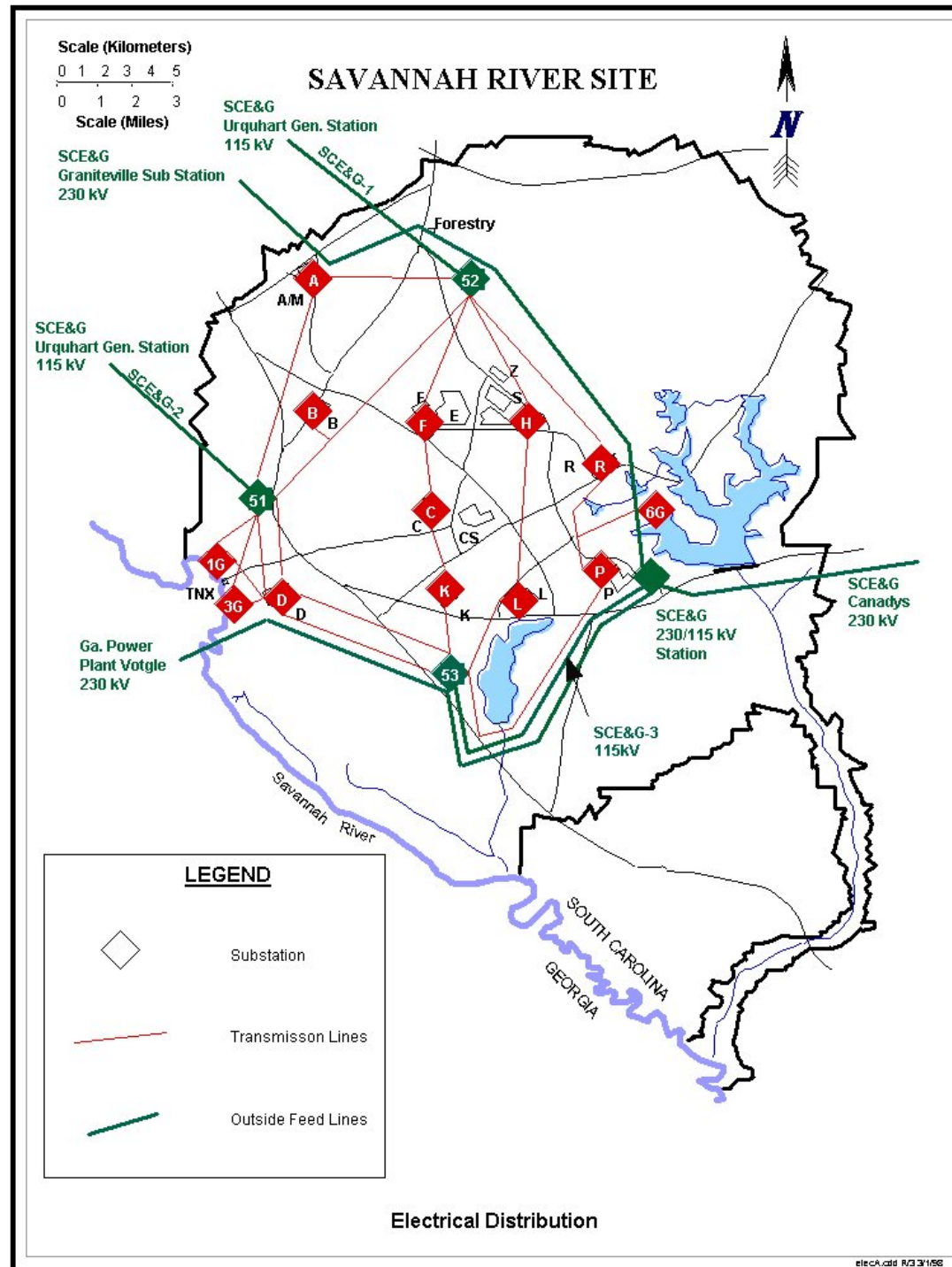


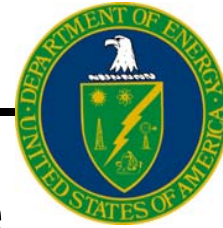
Infrastructure Scope

Utilities – Major systems:

Electrical Power (cont.)

- Approximately one half of current demand is provided by SCE&G.
- Remaining half is provided by M&O operation of D-Area Powerhouse.
- D-Area Powerhouse to be replaced in 2009 with steam only plant. All electrical service will then be provided by SCE&G.



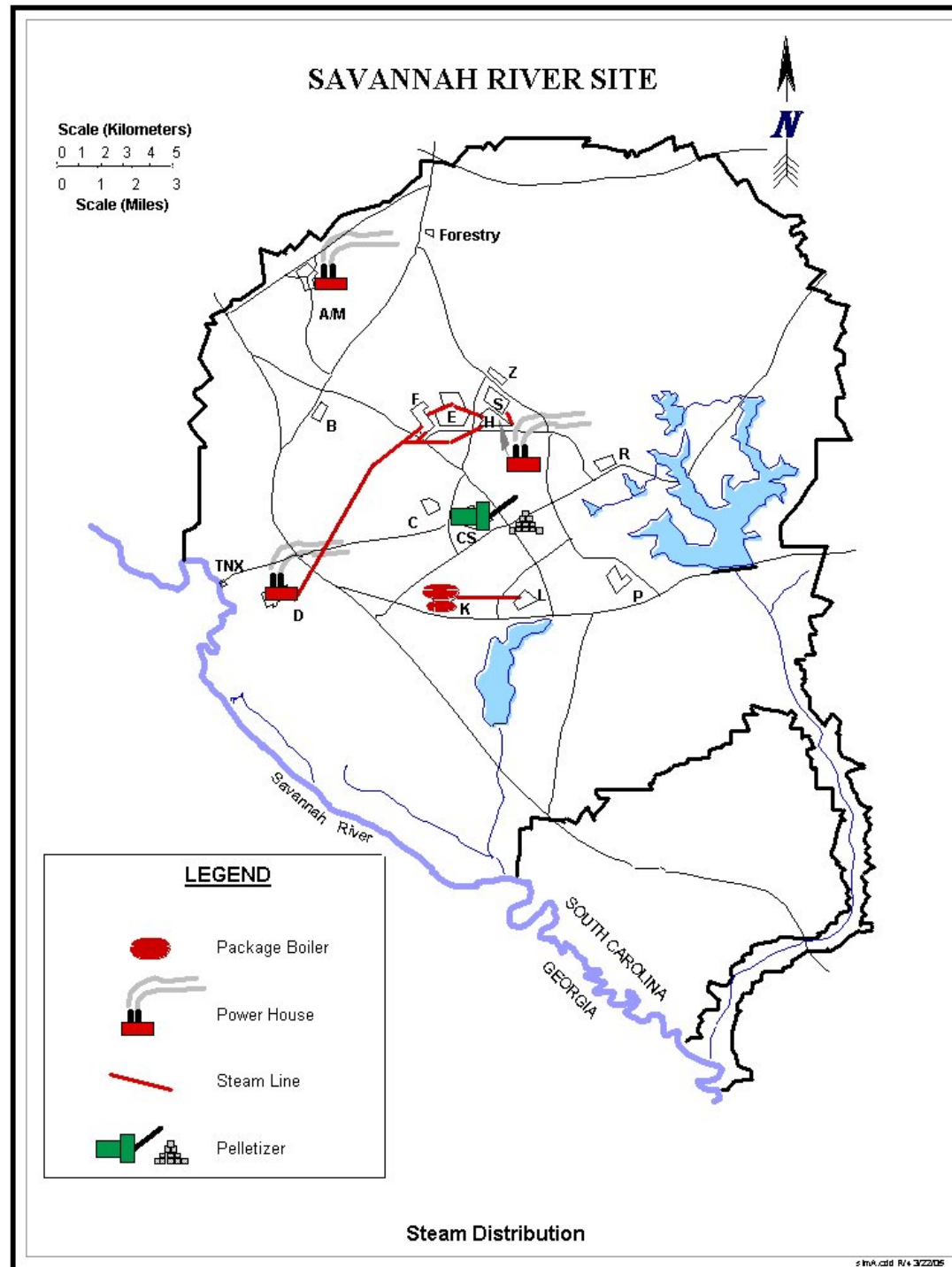


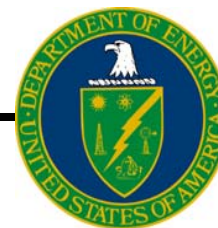
Infrastructure Scope

Utilities – Major systems:

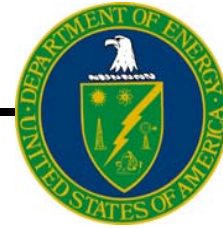
Steam

- Average daily demand of 165,000 pounds/hour.
- A-Area Powerhouse to be replaced in 2008.
- D- and K- Area Powerhouses to be replaced in 2009.

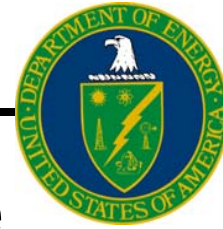




A-Area Powerhouse



D-Area Powerhouse

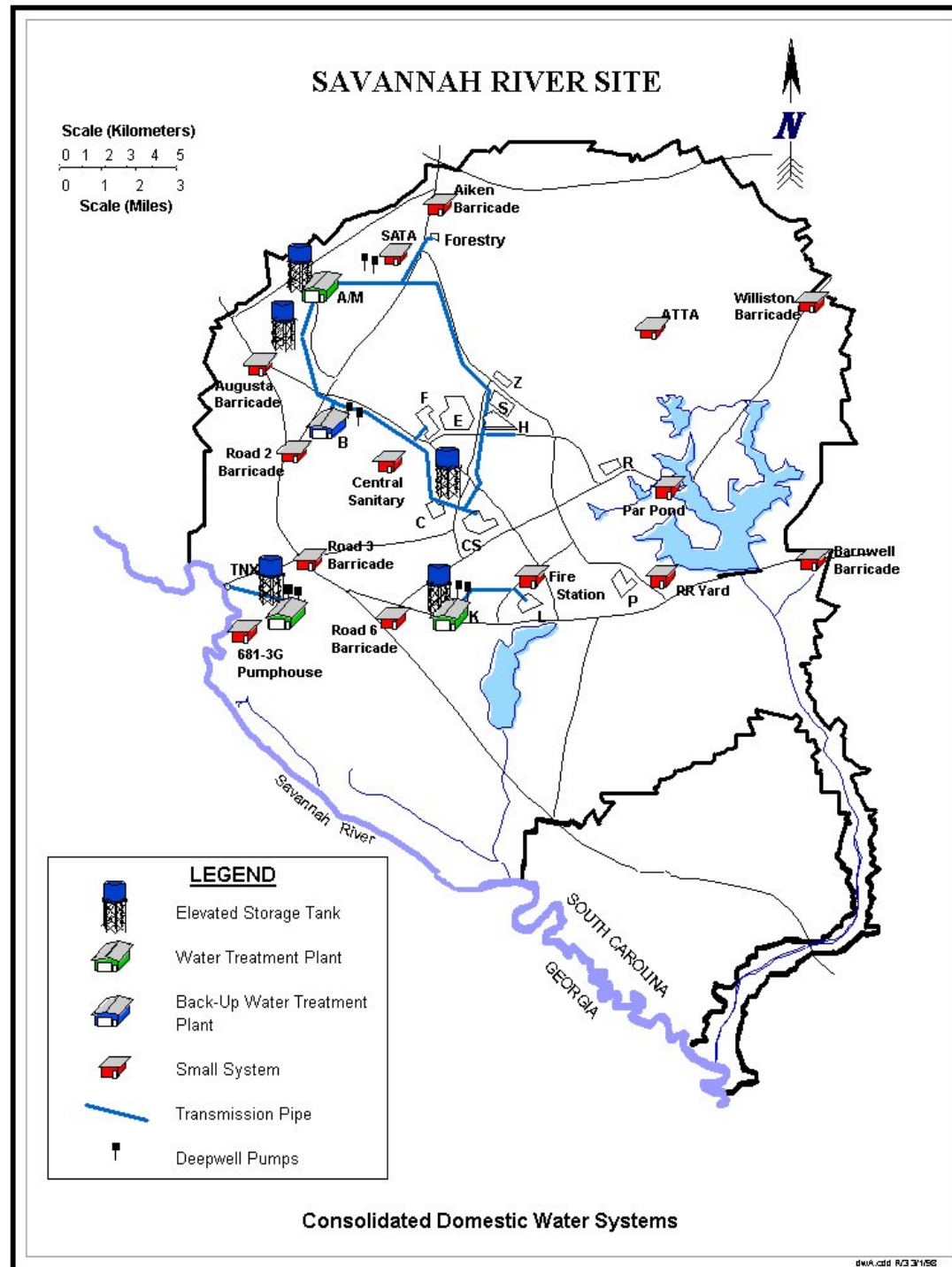


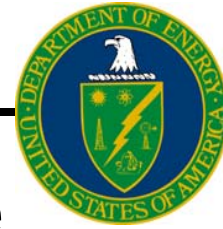
Infrastructure Scope

Utilities – Major systems:

Domestic Water

- 32 mile central loop system provides service to most administrative and industrial areas.
- 17 satellite facilities provide service to remote areas.
- Total capacity = 7.8 mgd; total demand = 1.3 mgd.



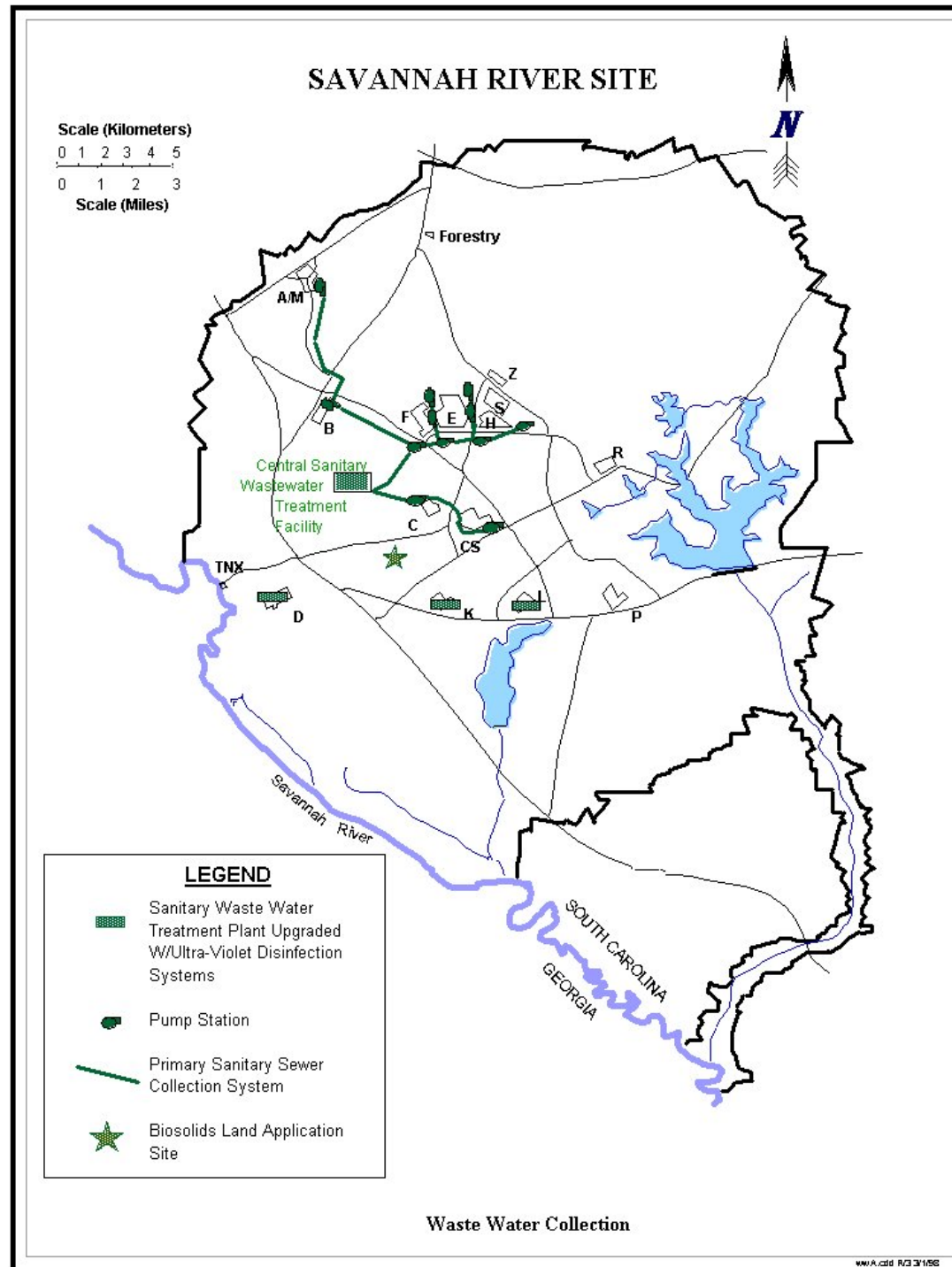


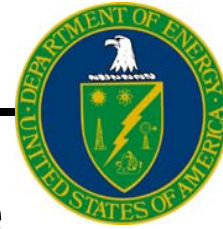
Infrastructure Scope

Utilities – Major systems:

Sanitary Sewer

- 18 mile collection trunk and 1.0 mgd central sanitary wastewater plant service most administrative and industrial areas.
- Three satellite package plants service remote areas.
- Total capacity = 1.05 mgd; total demand = 0.3 mgd.

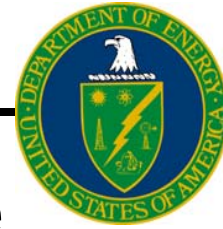




Infrastructure Scope

Utilities – Other:

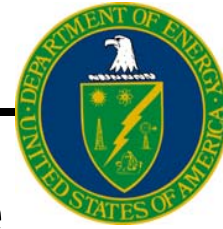
- Fire Water – 12 area-wide systems
- Process Water -2.4 mgd demand through 11 wells and associated piping.
- River Water – 7.2 mgd demand through one pump station and 43 miles of large diameter pipe.
- Chilled Water – Two central plants (A- and B-Areas) and individual chiller units in most industrial areas.



Infrastructure Scope

Facilities

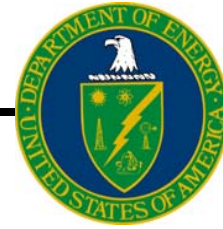
- Ponds and Dams – 2 high hazard and 10 low hazard dams and associated ponds, structures.
- Roads and Bridges – 133 miles of paved roads and 17 bridges.
- Communications – 3,400 radios, 10,000 pagers, 13 repeater sites.
- Office Buildings – 67 permanent structures and 280 trailers comprising 1.9 million sf.



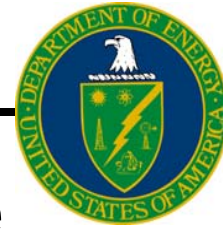
Infrastructure Scope

Transportation

- Railroad System – 33 miles of active track, two locomotives, 14 rail cars, classification and repair yard.
- Vehicle Fleet – approximately 1,000 administrative and support vehicles (90% leased from GSA).
- Trucking System – 7,600 moves per year involving equipment, supplies, and wastes.
- Fuel System – 9 fueling stations and two bulk facilities dispensing gasoline, ethanol, and diesel.



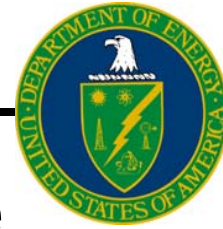
Railroad Classification Yard



Infrastructure Scope

Operations Support Functions

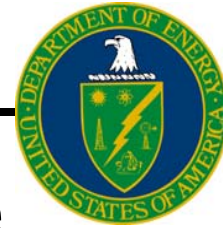
- Machine Shops – primary shop in A-Area processes 300 orders annually; six smaller satellite shops site-wide.
- Breaker Shop - 320 orders annually.
- Motor Repair Shop – repairs up to 250 hp motors; 350 orders annually.
- Diesel Maintenance - 85 diesel units site-wide.
- Fire Systems – 610 systems site-wide.
- Portable Equipment Commodity Management Center (PECMC) – 1,500 items of equipment.



Infrastructure Scope

Operations Support Functions (cont.)

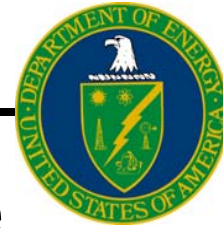
- Electronics/Calibration Shops – repair and calibrate most electronic instrumentation on site.
- Rigging and Cranes – inspect 406 cranes, procure rigging, perform all major lifting.
- Relief Valve Shop – 1,300 orders per year.
- HEPA Test Facility – 3,000 filter tests per year.
- Containment Fabrication Facility – fabricates containment units for rad work; 5,800 units per year.



Infrastructure Scope

Support Services

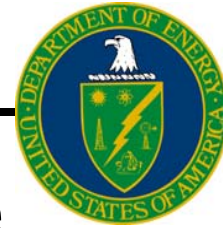
- Occupational Medicine - two medical facilities provide treatment to over 10,000 employees.
- Documentation and Information Services – publications, video, photography, records management and document control.
- Warehouse Operations – 200,000 sq. ft. of warehouse and two acres of secure laydown yards.
- Excess and Salvage – 90,000 sq. ft. of facilities and 20 acres of secure laydown yards.



Infrastructure Scope

Support Services (cont.)

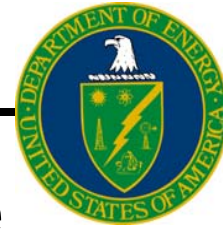
- Chemical Management – 25,000 sq. ft. of facilities store approximately 500 line items.
- Mail Service – internal/external mail involves approximately 5.5 million pieces annually.
- Food Service – 9 food court/cafeteria facilities, 400 vending machines.



Infrastructure Scope

Support Services (cont.)

- Regulated Laundry – 100,000 pounds of protective clothing and 800 respirators per month.
- Pest Control – termite and pest control for 600 buildings.
- Janitorial – routine cleaning of 600 buildings comprising more than 3 million sq.ft.
- Grounds Maintenance – seasonal mowing of lawns, fields, roadways; 1,000 acres
- Moving Services – movement of personnel and furniture.



Infrastructure Scope

Program Challenges

- Maintaining “right size” for current and future missions.
- Working with limited budget.
- Integrating activities across multiple contracts and activities.
- Aging facilities and equipment